

CLAIMS:

Sub C1  
1. An electrical connector comprising: an insulative housing, conductive contacts within an interior of the housing, wiping surfaces on a mating end of the housing, and conductive surfaces on the contacts being rearward of the wiping surfaces and offset laterally of the wiping surfaces to engage unwiped surface areas of mating contacts of another, mating connector, which mating contacts wipe against the wiping surfaces prior to engagement of the unwiped surface areas of the mating contacts with the conductive surface areas of the contacts.

Sub A1  
2. An electrical connector as recited in claim 1, wherein, the wiping surfaces project along paths of mating insertion of the contacts, and are interposed between the contacts and a front edge of the housing.

3. An electrical connector as recited in claim 1, wherein, the conductive surface area on each contact is between edge margins on each contact, and the wiping surfaces are offset from the conductive surface areas on the contacts, and are in alignment with the edge margins on the contacts.

2.4. An electrical connector as recited in claim 1, wherein, an insulative divider separates one of the contacts from another of the contacts of each pair of the contacts.

Sub A2  
5. An electrical connector as recited in claim 4, further comprising: at least one conductive power contact having a pair of contact fingers on opposite sides of the divider, the contact fingers having a surface area sufficiently broad to radiate heat from electrical power dissipation, and the fingers extending parallel to the signal contacts.

4.6. An electrical connector as recited in claim 1, wherein, the wiping surfaces are interposed between the contacts and a front edge of the housing, and conductive

shielding encircles the housing, a front edge of the shielding being closer to the front edge of the housing than the contacts.

5 5. ~~7~~. An electrical connector as recited in claim 1, wherein, front tips of the contacts are recessed from a front edge of the housing, and the wiping surfaces are interposed between the tips of the contacts and the front edge of the housing.

10 6. ~~8~~. An electrical connector as recited in claim 1, wherein, the wiping surfaces cover front tips of the contacts.

7. ~~9~~. An electrical connector as recited in claim 1, wherein, the wiping surfaces are ramps.

15 ~~Sub 103~~ 10. An electrical connector as recited in claim 1, wherein, the conductive surface <sup>u w</sup> areas are raised with respect to edge margins of the contacts received in grooves in the housing.

20 11. An electrical connector comprising: an insulative housing, conductive contacts within an interior of the housing, wiping surfaces on a mating end of the housing, conductive surfaces on the contacts being rearward of the wiping surfaces to engage mating contacts of another, mating connector, which mating contacts pass the wiping surfaces prior to engagement with the conductive surfaces, and a conductive shield surrounding the mating end of the housing, the wiping surfaces being closer to the shield than the contacts.

30 12. An electrical connector as recited in claim 11, wherein, the wiping surfaces project along paths of mating insertion of the contacts, and are interposed between the contacts and a front edge of the housing.

35 ~~Sub 104~~ 13. An electrical connector as recited in claim 11, wherein, the conductive surface area on each contact is between edge margins on each contact, and the wiping surfaces are offset from the conductive surface areas on

the contacts, and are in alignment with the edge margins on the contacts.

9 <sup>10.14.</sup> An electrical connector as recited in claim 11, wherein, an insulative divider separates one of the contacts from another of the contacts of each pair of the contacts.

10 <sup>15.</sup> An electrical connector as recited in claim 14, further comprising: at least one conductive power contact having a pair of contact fingers on opposite sides of the divider, the contact fingers having a surface area sufficiently broad to radiate heat from electrical power dissipation, and the fingers extending parallel to the signal contacts.

15 <sup>12.16.</sup> An electrical connector as recited in claim 11, wherein, the wiping surfaces are interposed between the contacts and a front edge of the housing, and conductive shielding encircles the housing, a front edge of the shielding being closer to the front edge of the housing than the contacts.

20 <sup>13.17.</sup> An electrical connector as recited in claim 11, wherein, front tips of the contacts are recessed from a front edge of the housing, and the wiping surfaces are interposed between the tips of the contacts and the front edge of the housing.

25 <sup>14.18.</sup> An electrical connector as recited in claim 11, wherein, the wiping surfaces cover front tips of the contacts.

30 <sup>15.19.</sup> An electrical connector as recited in claim 11, wherein, the wiping surfaces are ramps.

<sup>20.</sup> An electrical connector as recited in claim 11, wherein, the conductive surface areas are raised with respect to edge margins of the contacts received in grooves in the housing.

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E2